

Serial No. 09/878,321
Amendment dated November 4, 2003
Reply to Office Action of August 6, 2003

Docket No. K-0293

REMARKS

Claims 1, 2 and 4-29 are pending in this application. By this Amendment, claims 1, 2, 7, 8, 13, 14 and 17-21 are amended and claims 28 and 29 are added. Support for new claims 28 and 29 can be found in the specification including the original claims and the figures, for example, see pages 4 and 7-9 of the original specification. Reconsideration in view of the above amendments and following remarks is respectfully requested.

I. 35 U.S.C. §103(a)

A. Claims 1, 4-9 and 22-23

The Office Action rejects claims 1, 4-9 and 22-23 under 35 U.S.C. § 103(a) over Amano (U.S. Patent No. 6,031,325) in view of Bozzay et al. (U.S. Patent No. 4,096,408 – hereinafter Bozzay). Since the references, alone or in combination, fail to disclose or suggest all of the features of the claims, the rejection is respectfully traversed.

Applicant submits that Amano discloses a focus electrode of an electron gun for a color cathode ray tube. The Office Action states that “Amano further discloses in Figure 1A, ‘to the third electrode 13 and 5.sub.-2 electrode 52, a voltage that is a superimposed voltage (V.sub.F + V.sub.DF) of a dynamic focus voltage V.sub.DF (refer to FIG. 8) synchronous with horizontal deflection of the focus voltage V.sub.F applied to the 5.sub.-1C electrode 51C and the focus

voltage $V_{sub.F}$ is applied as in the related art. Thereby a quadrupole lens is formed between the 5.sub.-1C electrode 51C and 5.sub.-2 electrode 52, and the strength of the focus lens formed between the 5.sub.-2 electrode 52 and the sixth electrode 16 is varied. As the result, the shape of electron beams on the right and left periphery of the fluorescent screen is improved.' (column 10, line 57-67)." See Office Action dated August 6, 2003, pages 3-4.

However, Amano fails to disclose or suggest any reason or motivation for using a wire in contact with a third electrode arranged so as not to pass through a particular area.

Bozzay fails to cure this deficiency. Applicant submits that Bozzay merely discloses internal electrical leads 14 illustrated in Fig. 2 of Bozzay. Bozzay does not disclose or suggest any particular placement of a wire, let alone one with one end in contact with a third electrode and the other end in contact with a stem pin applying a dynamic voltage, where the wire is in a particular location.

Additionally, the Office Action's statement of motivation for combining Bozzay with Amano would not entail using the wire of Bozzay with Amano, but rather using Bozzay's electrode support tab 55, as illustrated in Fig. 9, in order to reduce the stress and the tendency of electrode displacement in Amano.

Applicant submits that neither Bozzay nor Amano disclose or suggest any reason for using the internal electrical leads 14 of Bozzay in any other application, let alone Amano. The only

discussion of the internal leads in Bozzay is that “operating signals and voltages are conveyed to electrodes of gun 10 was in the envelope by means of internal electrical leads, to typical ones of which are shown by 14.” See col. 3, lines 41-44 of Bozzay. Thus, using the internal electrical leads of Bozzay would not have been obvious to one of ordinary skill in the art to use with Amano as Bozzay discloses only the “improvement” of using electrode support tabs 55.

For at least the reasons set forth above, Applicant respectfully submits that claim 1 is allowable. Claims 4-9 and 22-23 depend from claim 1, and are allowable for at least the same reasons, as well as their added features and the combinations thereof. Withdrawal of the rejection is respectfully requested.

B. Claims 2, 10-21 and 24-27

The Office Action rejects claims 2, 10-21 and 24-27 under 35 U.S.C. § 103(a) over Chen (U.S. Patent No. 5,350,967) in view of Bozzay. Since the references, alone or in combination, fail to disclose or suggest all the features of the claims, the rejection is respectfully traversed.

Applicant respectfully submits that Chen appears to disclose as illustrated in Figs. 5 and 6, an in-line electrode gun for use in a color cathode ray tube which includes a fixed, or static, electrostatic quadrupole in a low voltage beam forming region exerting a negative astigmatism on electron beams where the negative astigmatism is compensated by a dynamic electrostatic

quadrupole in the cathode ray tube's main focusing lens. See Chen Abstract. However, Chen does not disclose or suggest at least the feature of claim 2, which includes a first wire having one end in contact with a dynamic electrode, the other end in contact with a first stem 10 applying a dynamic voltage, and a first body of the first wire between the one end and the other end and a second wire having one end in contact with a third electrode, the other end in contact with a second stem pin applying a static voltage, and a body of a second wire between the one end and the other end, wherein the first and second wires are arranged so as not to pass through a space formed between an outer surface of each of the bead glasses closest to an inner surface of a neck tube of the cathode ray tube and the inner surface of the neck tube of the cathode ray tube closest to the bead glasses. See also the Office Action, page 8, first paragraph.

Bozzay fails to cure the deficiencies of Chen. Bozzay merely discloses internal leads within an envelope, but does not disclose or suggest any purpose or reasons to modify any other references with such internal leads. Rather, Bozzay discloses using electrode support tabs 55 to absorb stress induced during the mounting process to leave the gun structure substantially free of residual stress, thus reducing an incidence of bead fracture and electrode displacement.

Therefore, any combination of Chen and Bozzay would merely include the additional use of the electrode support tabs in the Chen gun, but would not suggest or motivate one of ordinary skill in the art to combine the internal electrical leads of Bozzay with the electron gun of Chen.

For at least the reasons set forth above, Applicant respectfully submits that claim 2 is allowable. Claims 10-16 and 24-25 depend from claim 2, and are allowable for at least the same reasons, as well as their added features and the combinations thereof. Withdrawal of the rejection of claims 2, 10-16 and 24-25 is respectfully requested.

With respect to claim 17, Applicant respectfully submits that the references fail to disclose or suggest, as recited in claim 17, at least the feature of a plurality of electrodes comprising a third electrode and a dynamic electrode with higher voltage than a static grid, an acceleration electrode and a fourth electrode and a bead glass that holds said electrodes at predetermined distances from one another and a first wire having one end communicatively coupled to the third electrode of the plurality of electrodes and the other end communicatively coupled to one of the plurality of stem pins, wherein the wire is arranged so as to not pass between a surface of the bead glass closest to an inner surface of a neck tube of the cathode ray tube and the inner surface of a neck tube of the cathode ray tube.

Similar to claim 2, Applicant respectfully submits that Chen and Bozzay do not combine to yield a wire as located in claim 17 arranged so as to not pass between a surface of the bead glass closest to an inner surface of a neck tube of the cathode ray tube and the inner surface of a neck tube of the cathode ray tube. Furthermore, there is no motivation for Bozzay to be combined with Chen. The Office Action states that the motivation would be "in order to convey different

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operating signals and static voltage power to individual electrodes, furthermore, unitized and enhanced the structural integrity of the electrode gun.” See Office Action, pages 8-9. However, the electrode support tabs 55 would be substituted from Bozzay into Chen, which would not affect the placement of the wire in Bozzay or Chen.

For at least the reasons set forth above, Applicant respectfully submits that claim 17 is allowable. Claims 18-21 and 26-27 depend from claim 17, and are allowable for at least the same reasons as well as their added features and the combinations thereof. Withdrawal of the rejection is respectfully requested.

II. New Claims

By this Amendment, claims 28 and 29 are added to the application. Claims 28 and 29 broadly recite features of the preferred embodiment(s). It is respectfully submitted that the new claims are allowable over the references of record for at least the reasons discussed above in connection with claims 1, 2 and 4-27.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes

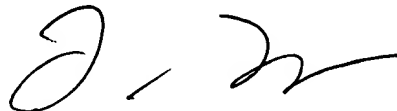
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would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Laura L. Lee, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP



Daniel Y.J. Kim, Esq.
Registration No. 36,186
Laura L. Lee, Esq.
Registration No. 48,752

P.O. Box 221200
Chantilly, VA 20153-1200
703 502-9440 DYK/CLD/LLL:knv
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